

# Publications for 2015

## Refereed Article Publications

Author	Title
Dharam V. Chopra	(with Richard Low, and R.Dios) "A note on discrete factorial designs of resolutions 5 and 7 and balanced arrays", Journal of Combinatorial Mathematics and Combinatorial Computing, (2014) Vol.90, pp.159-165.
Dharam V. Chopra	(with Richard M.Low) "A Note on resolution nine factorial designs using coincidences", Congressuse Numerantium, 2015.
Jason W. Ferguson	(with Dotter, Aaron; Conroy, Charlie; Milone, A. P.; Marino, A. F.; Yong, David) "Stellar models of multiple populations in globular clusters - I. The main sequence of NGC 6752" 2015, MNRAS, 446, 1641.
Hussein H Hamdeh	(with A.M. Elshahawy, M.H. Mahmoud, Salah A. Makhlof) "Role of Cu <sup>2+</sup> substitution on the structural and magnetic properties of Ni-ferrite nanoparticles synthesized by the microwave-combustion method", Ceramic International, volume 41, issue 9, 11264-11271, doi:10.1016/j.ceramint.2015.05.079 (2015).
Hussein H Hamdeh	(with Wenping Ma, Gary Jacobs, Willson Shafer, Dennis E. Sparks, Burtron H. Davis) "Fischer-Tropsch Synthesis: Effect of hydrohalic acids and hydrogen cyanide in syngas on a precipitated iron catalyst", ACS Catalysis, 2015, 5, 3124-3136, Publication Date (Web): April 8, 2015 (Article) DOI: 10.1021/acscatal.5b00023.
Hussein H Hamdeh	(with Wenping Ma, Gary Jacobs, Dennis E. Sparks, Venkat Ramana Rao Pendayala, Shelly G. Hopps, Gerald A. Thomas, Aimee MacLeman, Yongfeng Hu, Burtron H. Davis) "Fischer-Tropsch Synthesis: Effect of ammonia in syngas on the Fischer-Tropsch synthesis performance of a precipitated iron catalyst", J. of Catalysis, 326 (2015) 149-160, DOI:10.1016/j.cat.2015.04.004.
Hussein H Hamdeh	(with Zein K. Heiba, Mohamed Maker Mohamed, and M.A. Ahmed) "Structural Analysis and Cations Distribution of nanocrystalline Ni <sub>1-x</sub> Zn <sub>x</sub> Fe <sub>1.7</sub> Ga <sub>0.3</sub> O <sub>4</sub> ", Journal of Metals and Compounds, 618 (2015) 755-760, DOI 10.1016/j.jallcom.2014.08.241.
Hussein H Hamdeh	(with Wenping Ma, Gary Jacobs, Dennis E. Sparks, Wilson D Shafer, Venkat Ramana Rao Pendayala, Shelly G. Hopps, Yongfeng Hu, Qunfeng Xiao, Burtron H. Davis) "Effect of H <sub>2</sub> S in syngas on the Fischer-Tropsch Synthesis performance of a precipitated iron catalyst", Applied Catalysis A, DOI:10.1016/j.apcata.2015.035, available on line, December 30, 2015.
Hussein H Hamdeh	(with Muthu Kumaran Gnanmani, Gary Jacobs, Wilson D. Shafer, Fang Liu, Shelly Hoops, Gerald A. Thomas, Burtron H. Davis) "Hydrogenation of carbon oxide over Fe-Co bimetallic catalysts", ACS catalysis, DOI: 10.1021/acscatal.5b01346, publication date (Web), December 24, 2015.
Xiaomi Hu	"On an ad hoc test for order restricted multivariate normal means," Communications in Statistics, Theory and Methods, Online on April 15, 2015 at doi: 10.1080/03610926.2013.864771 Proof reading for paper version publication submitted.
Victor Isakov	"Increasing stability for near field from the scattering amplitude", AMS Contemp. Math. Series, 640 (2015), 59-70.
Thalia D. Jeffres Tianshi Lu	(with Klaus Kirsten) "Zeta Function of Self-Adjoint Operators on Surfaces of Revolution", Journal of Physics A, 48 (2015).
Chunsheng Ma	"Multifractional vector Brownian motions, their decompositions and generalizations", Stochastic Analysis and Applications, vol. 33, 535-548.

<b>Chunsheng Ma</b>	“Isotropic covariance matrix functions on all spheres”, <i>Mathematical Geosciences</i> , vol. 47, 699-717.
<b>Chunsheng Ma</b>	(with Balakrishnan, N. and Wang, R.) “Logistic vector random fields with logistic direct and cross covariances”, <i>Journal of Statistical Planning and Inference</i> , vol. 161, 109-118.
<b>Daowei Ma</b>	(with T. Neelon) “On convergence sets of formal power series, <i>Complex Analysis and Its Synergies</i> ”, (2015) 1:4, DOI 10.1186/s40627-015-0004-4.
<b>Hari Mukerjee</b>	(with Ganesh Malla and Edgardo Lorenzo) “A new test for a new better than used in expectation lifetimes”, <i>Communications in Statistics: Theory and Methods</i> , 44(2015): 4727-4739.
<b>Phillip E. Parker</b>	(with Kensuke Onda) “Nilsolitons of $H$ -type in the Lorentzian Setting, <i>Houston J. Math.</i> 41 (2015) 1137--1151.
<b>Catherine Searle</b>	(with P. Solorzano, F. Wilhelm) “Regularization via Cheeger Deformations”, <i>Annals of Global Analysis and Geometry</i> , doi:10.1007/s10455-015-9471-3, pp. 1--9 (2015).
<b>Catherine Searle</b>	(with F. Wilhelm) “How to lift positive Ricci curvature”, <i>Geometry and Topology</i> , 19 (3), pp. 1409-1475 (2015).
<b>Nick Solomey</b>	(with M. Bozzo) “International Conference on Hyperons, Charm and Beauty Hadrons” (BEACH 2014) proceedings, <i>Journal of Physics</i> , Volume 556 2014, published in Jan. 2015.
<b>Ziqi Sun</b>	(with W. Zeng) “A Method for searching for prime pairs in the Goldbach conjecture”, <i>International J. Math &amp; Comp.</i> 10 (2015), No 2, 115-126.

## Reports

<b>Author</b>	<b>Title</b>
<b>Alexander Bukhgeym</b>	“Carleman formulas and inverse problems”, SIAM-SIAS March 20-22 2015, University of Alabama at Birmingham, page 30

## Published Conference Proceedings

<b>Author</b>	<b>Title</b>
<b>Alexander Bukhgeym</b>	“Zeta function, Riemann hypothesis and inverse problems”, International Conference Differential Equations and Mathematical Modeling, Ulan-Ude Russia., June 22-27, 2015.
<b>Hussein H Hamdeh</b>	(with Venkat Ramana Rao Pendyala, Uschi M. Graham, Gary Jacobs, Burtron H. Davis) “Fischer-Tropsch synthesis: effect of potassium promoter loading over precipitated iron catalyst”, 24th North American Catalysis Society Meeting (NAM), Pittsburg, PA, June 14-19, 2015.
<b>Hussein H Hamdeh</b>	(with Muthu Kumaran Gnanmani, Gary Jacobs, Fang Liu, Shelly Hoops, Gerald A. Thomas, Burtron H. Davis) “Decomposition study of Cobalt-Iron Bimetallic Oxalates”, 24th North American Catalysis Society Meeting (NAM), Pittsburg, PA, June 14-19, 2015.
<b>Chunsheng Ma</b>	“Multifractional vector Brownian motions, their decompositions, and generalizations”, Big Data Statistics, Financial Econometrics and Beyond Workshop, Shanghai University of Finance and Economics, Shanghai, China, July 6, 2015.

## Formal Papers Delivered at Professional Meetings

Author	Title
Elizabeth Behrman	“Quantum learning of entanglement”, Keynote address, 2015 IEEE International Conference on Research in Computational Intelligence and Communication Networks (ICRICN) Kolkata, India, November 2015.
Elizabeth Behrman	“Quantum learning,” Inaugural lecture, Quantum and Nano Computing Systems and Applications 2015 (QANSAS), Dayalbagh, Agra, India, November 2015.
Thomas K. DeLillo	“Alan Elcrat's contributions to computational complex analysis”, Banff International Research Station Workshop on Modern Applications of Complex Variables: Modeling, Theory and Computation, 1/12/15.
Thomas K. DeLillo	(with Raja Balu) “Numerical methods for Riemann-Hilbert problems in multiply-connected circular domains”, First SIAM Central States Section Conference, MST, Rolla, MO, 4/11/15.
Hussein H Hamdeh	(with Venkat Ramana Rao Pendyala, Uschi M. Graham, Gary Jacobs, Burtron H. Davis) “Fischer-Tropsch synthesis: effect of potassium promoter loading over precipitated iron catalyst”, 24th North American Catalysis Society meeting (NAM), Pittsburg, PA, June 14-19, 2015.
Hussein H Hamdeh	(with Muthu Kumaran Gnanmani, Gary Jacobs, Fang Liu, Shelly Hoops, Gerald A. Thomas, Burtron H. Davis) “Decomposition study of Cobalt-Iron Bimetallic Oxalates”, 24th North American Catalysis Society meeting (NAM), Pittsburg, PA, June 14-19, 2015.
Xiaomi Hu	“Generalized Inverses and Matrix Spaces”, 24th International Workshop on Matrix and Statistics, Haikou, China, May 27, 2015.
Victor Isakov	“On increasing stability in the inverse source and conductivity problems”, 1113-th American Mathematical Society Meeting, Memphis, TN, October 2015.
Kirk Lancaster	“Capillary Surfaces: Necessary and Sufficient Conditions for Continuity at Corners”, Asymptotic Problems: Elliptic and Parabolic Issue, Wilnius, Lithuania, June 1-5 <sup>th</sup> , 2015.
Catherine Searle	(with Christine Escher) “Non-negative curvature and torus actions”, Geometry and Topology Seminar, University of Pennsylvania, April 15, 2015.
Catherine Searle	(with Christine Escher), “Non-negative curvature and torus actions”, Glances at Manifolds Workshop, Krakow, Poland, July 19, 2015.
Catherine Searle	(with Christine Escher) “Non-negative curvature and torus actions I”, Geometry/Topology Seminar, Wichita State University, September 14, 2015.
Catherine Searle	(with Christine Escher) “Non-negative curvature and torus actions II”, Geometry/Topology Seminar, Wichita State University, September 28, 2015.
Catherine Searle	(with Christine Escher) “Non-negative curvature and torus actions”, Canadian Math Society Winter Meeting, Montreal, Canada, December 5, 2015.
Catherine Searle	(with Christine Escher), “Non-negative curvature and torus actions”, Geometry/Topology Seminar, University of Oklahoma at Norman, December 9, 2015.